CLAIMS

1. A protein hydrolysate which is rich in tripeptides whereby the tripeptides are rich in proline at one end of the peptide.

2. A protein hydrolysate according to claim 1 wherein at least 20 molar %, preferably at least 25 molar %,or more preferably at least 30 molar % of the peptides having a molecular weight of 200 to 2000 Da is present in the hydrolysate as tripeptide.

3. A protein hydrolysate according to claim 1 or 2 wherein preferably at least 20%, preferably at least 30%, or more preferably at least 40% of the proline present in the starting protein is present in the tripeptides.

4. A protein hydrolysate according to any one of claims 1 to 3 wherein at least 30% of the tripeptides, or preferably at least 35% of the tripeptides, have a carboxy terminal proline.

5. A protein hydrolysate according to any one of claims 1 to 4 wherein at least 70 molar % of the peptides, or preferably at least 75 molar % of the peptides contain 2 to 7 amino acid residues (dipeptide to heptapeptide).

6. A method of producing a protein hydrolysate,
the method comprising contacting a protein substrate with:
a) endoprotease; and
b) tripeptidase (TPAP).

7. A method according to claim 6 whereby the endoprotease is a proline specific endoprotease (PSE), a serine protease, an aspartic protease or a metalloendoprotease, preferably the endoprotease is a PSE.

8. A method according to claim 6 or 7 whereby the protein substrate is first contacted with serine protease, aspartic protease or metalloendoprotease and subsequently the TPAP and optionally PSE is added.

9. Use of protein hydrolysate according to any one of claims 1 to 5 for mammalian, preferably human, consumption.

10. An enzyme composition comprising
(a) an endoprotease and
(b) a tripeptidase (TPAP).

11. An enzyme composition according to claim 10 wherein the endoprotease is a serine protease, an aspartic protease, a metalloendoprotease or a proline specific endoprotease (PSE), preferably the endoprotease is a PSE.

12. An enzyme composition according to claims 10 or 11 whereby this composition when added to a suitable protein is able to produce a protein hydrolysate of any one of the claims 1 to 5.

13. A food or feed product comprising a hydrolysate of anyone of claim 1 to 5.

14. The use of an enzyme composition according to anyone of claims 10 to12 to reduce the intolerance to proline rich food stuffs.

15. The use of an enzyme composition according to anyone of claims 10 to 12 in food or feed or in /the production of food or feed.